2: Gamble S-5 (1926-1933) 1954 / AF12 North China AF12

Birth and Death Rates

163 A study made by the health department of the Mass Education Association found the crude birth rate to be 40.1 per 1,000, the crude death rate 27.2 per 1,000. The infant mortality was 199 per 1,000 live births, the maternal death rate 13.0 per 1,000 live births.

These figures verify the general report that the population was gradually increasing. The only figures we were able to secure that would give any indication of population growth over a period of years were from the elders of one village. They said that the number of families had increased steadily from 155 in 1882 to 180 in 1932, a growth of 16 per cent in 50 years. (See Chapter XV.) The increase, of course, could be the result of division of families rather than an increase in the number of persons, but the steady growth in the number of families seems to indicate at least some growth in population.

164 A health study of the students in 25 village primary schools showed that 58.5 per cent of the children had trachoma and 26.2 per cent ringworm.

Foot-binding

304 Foot-binding was almost universal among the women over 40 years of age in the 515 families (99.2 per cent). None of the girls under 13 178 years of age had bound feet. The figures for the intervening five year age groups show how a cultural pattern, which in the past had successfully defied an imperial ban, had disappeared within 30 years.

304 The origin of the Chinese custom of foot-binding is uncertain, but apparently it began about one thousand years ago. It is first definitely mentioned in connection with the court of the southern T'ang dynasty at Nanking, 937–75 A.D. This court practiced a life of luxury and enjoyed the sight of dancing girls, their feet clad with "bow-shoes", the upturned toes of which resembled the bow of a Roman galley. The small feet of the sought-after dancers may have started the style, but it hardly explains the spread and long continuance of foot-binding, which has meant so much limitation, discomfort, and pain to so many individuals over so many years.

In the twelfth century the highly influential scholar-philosopher, Chu Hsi (1130–1200) was, according to Dr. Lin Yutang, "enthusiastic in introducing foot-binding in southern Fukien as a means of spreading Chinese culture and teaching the separation of men and women."

1 [In Ting Hsien (Province) -- Analyst]

2: Gamble S-5 (1926-1933)1954 . : AF12 North China AF12

crops were eaten. The worst damage was in the area to the south of the city.

In 1705 the summer locusts flew in such swarms that they covered the sun, but it is reported that they were soon killed. In 1825 so many locusts were flying together that the sun could not shine through. They stayed for three days.

Killing the locusts or scaring them away was about the only protection the farmers had. As soon as any locusts were seen everyone turned out. Gongs and other noise-makers were beaten to keep the locusts from settling on the crops. Beaters of all sorts, spades, forks, flat pieces of wood, shoe soles nailed on sticks, brooms, and bundles of willow twigs were used to kill the locusts. Ditches were dug and the locusts driven into them were buried there. Fires were lighted at night to attract the insects so they could be killed.

The government often offered a bounty to encourage the people to kill the locusts. In the spring of 1915 the rate was 10 cash (0.73 cents) per catty. Only 762 catties were caught. The bounty, plus some special prizes amounting to $3.50, brought the expenditure to $9.05. In the fall of the same year 5,945 catties were caught. As they were caught at the border of the hsien, the reward was doubled. It totaled $82. Eleven dollars food money for the police for the days they helped with the work made the total expenditure $93.

In 1920 64 villages caught 30,656 catties, some 20 tons. That year the reward was 50 cash per catty. It was to be paid half from the tax funds and half from funds secured by the village heads. The police expenditure amounted to $155.73.

There was considerable damage to the main fall crops in 1921. In 1922 the crops of six villages were attacked, but the locusts were quickly caught, so there was not widespread damage. The loss on some 13,859 mu was about 60 per cent. One-tenth of the taxes on that land was remitted, and the remainder spread over the two following years.

Cholera and plague were not frequent visitors to Ting Hsien, at least in epidemic proportions, as only eight visitations were reported in the list of calamities, and three of those were in 1918, 1919, and 1920. Plague was reported in 1554, 1581, 1821, 1918, and 1919, cholera in 1885, 1895, and 1920.

In 1918 Ting Hsien was one of the plague quarantine centers established along the railroad. All small stations were closed and passengers

2:Gamble S-5 (1926-1933) 1954 AF12 North China AF12

731 were allowed to board the train at the larger stations only after careful examination, which often included a quarantine of four to five days. 164 Passengers were required to furnish their own food, though the railroad gave some help if the people had no money. Communication was cut between the city and some 47 places to prevent the spread of the disease. The work was carried on under a specially organized plague prevention bureau with a special staff of doctors, nurses, and police. The reported expenses amounted to $4,230, of which $1,452 was for special police service. After the epidemic was apparently well in hand, a new case upset matters, until it was learned that the new patient had broken quarantine by going over the back wall of the isolation house to talk to a sick relative.

The death rate was not given for 1918, but in 1919 some 446 persons died of plague in Tinghsien city and some five or six villages. The police compelled the people to clean the streets and their houses and they also distributed medicine provided by the hsien government.

731 Fourteen earthquakes were reported, but the records ordinarily made but little comment on them. Ting Hsien, being in the coastal plain, was not in a primary earthquake zone and generally has not been seriously damaged by any earthquakes that have been felt. The earthquake in 106 was the earliest recorded calamity. That quake and the one in 503 are said to have broken the Heng Shan, a mountain some 25 miles northwest of Ting Hsien. The earthquake in 777 lasted for three days. Those of 1679 and 1720 were heavy enough to damage the pagoda. The top of the pagoda was shaken down in 1720. The latest earthquake mentioned was in 1882.

Two storms caused enough damage for them to be entered in the list of calamities. One was in 1723, the other in 1818.

Heavy thunder storms have been included in the list of calamities. One was recorded in 1562. In 1577 the Stone Buddha Temple, Shih Fo Szu, was hit by lightning and "the dragons rose up." In 1666 the pagoda was struck. In 1856 lightning set fire to the back hall of the examination buildings. In the fifth month of 1900, Boxer year, thunder was heard three times although no clouds were seen.

Snow is not an unusual occurrence in Ting Hsien, but ordinarily only a few inches fall at any one time. In 1713 snow fell in the fourth month while in the 12th month of the 24th year of Chia Ching, January, 1820, the snow was three feet deep.

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466 743 responsible for the following three duties: (1) physical examination of the workers, (2) prevention of epidemics, and (3) sanitary inspection of the factory.

Physical examination is required of both new and old workers. Any workman who is found to have contracted venereal disease is dismissed immediately. The pupils of the Ming Shin Primary School are also examined at regular intervals.

466 743 751 For the prevention of epidemics, the hospital is stocked with various kinds of anti-toxins. Every worker connected with the factory must be vaccinated, the aged ones alone being exempted. Two days are reserved by the hospital every year for giving free vaccination to the inhabitants of Tangku. In case there occurs an epidemic at Tangku, the workers are immediately noticed and taught preventive measures.

Inspection is held from time to time by the physician of the hospital. Preventive measures for sickness are prescribed for the workers.

164 127 The hospital possesses complete records of cases treated, such as registration cards, diagnoses, prescriptions, diaries of the physician and nurses, and so on. These have lately been carefully studied by the physician and have been compiled into statistics. A part of these statistics, limited to the period from October 1924 to September 1925, is now available for our use and we present them in the appendix of this book.

164 466 From the statistics of sickness and our personal observations, it may be concluded that diarrhoea is the most common disease among the inhabitants of Tangku as well as the Chiu Ta workers. The diseases typical of the Chiu Ta workers are of four kinds. (1) Cold.—They are easily contracted by workers after strenuous exertion and perspiration. (2) Skin inflammation.—This is caused by the dampness of the air and cold vapour in the salt refining room. Its prevalence can be gauged from the fact that as many as 437 cases occurred in the whole year. Skin inflammation is, in fact, an occupational disease. (3) Burns.—This is usually due to contact with boiled brine and hot iron implements. The careless handling of the latter is the sole

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cause of this kind of accidents. (4) Bruises.—1050 cases have been recorded in one year. Fortunately all the cases were slight in nature. According to our conversation with the workers, the salt boilers and bakers easily suffer from coughing and hypersecretion in the eyes which are often caused by the excessive heat in salt refining.

IV. COMPENSATION AND MUTUAL AID AGENCIES

Compensation.—According to the compensation provision in the regulations of the factory, compensations or rewards are given to workers under the following conditions:—

Art. 1. "Any worker who has rendered satisfactory service to the factory for more than eight years shall receive a special reward."

Art. 2. "Any worker who retires on account of invalidity or old age after having been in the service of the factory for more than ten years shall receive as reward a sum not less than $50 but not more than $150."

Art. 3. "Any worker wounded or disabled while engaged in the work of the factory shall receive as compensation a sum not less than $20 but not more than $60."

Art. 4. "Any worker who dies while engaged in the work of the factory, shall receive a sum not less than $60 or more than $200 for his funeral expenses."

The first two articles have not become operative so far, as only one worker was paid $100 on his retirement on account of blindness. Article 4 has practically remained a dead letter, as no death has ever occurred in connection with factory work. Thus only the third article is being carried out and during the last few years, the amount of compensation has been increased from $60 to $100.

Apart from the compensation for old age, casualty and mortality, the factory has always been generous in giving relief to the families of deceased workers. Thus, if a worker dies at Tangku, a sum of $50 is paid to his family to be disposed of as its people see fit. In case he is extremely poor, a coffin is given

APPENDIX I

Statistics of Cases Treated by the Hospital of the Chiu Ta Salt Refinery and the Pacific Alkali Works During the Period October 1, 1924 to September 30, 1925

(Total average number of workers throughout the year=900)

			1924			1925									Total
			Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	
Medical Department	Digestive System	Mouth	3	17	4	18	3	19	8	12	2	8	3	9	106
		Stomach & Intestine	109	89	48	84	64	89	114	97	203	406	314	404	1021
		Bile System & Peritoneum	—	—	—	—	—	—	2	1	1	—	—	—	4
	Respiratory System	Trachea & Bronchi	6	17	56	43	48	50	68	30	11	16	47	16	408
		Lungs	—	—	3	2	3	4	2	15	1	2	3	—	35
		Pleura	—	—	—	—	—	—	—	14	4	10	—	—	28
	Circulation System	Heart	6	7	17	5	1	—	1	20	27	17	11	1	113
		Blood Vessels	—	—	—	—	—	—	—	—	—	—	—	—	—
	Excretory System	Kidney	—	—	—	—	—	—	—	—	—	—	—	2	2
		Urinary Bladder	—	—	—	—	—	—	—	—	—	3	1	1	5
	Nervous System	Brain & Spinal Cord	—	—	—	—	—	—	—	7	—	—	—	—	7
		Peripheral Nerves	—	4	4	—	1	1	1	25	5	14	—	1	56
		Organs of Special Senses	—	17	2	1	—	4	—	—	2	2	1	14	43
	Infectious & Contagious Diseases		3	1	—	—	—	—	—	—	—	7	27	18	56
	Systematic & Blood Diseases		73	62	22	36	28	124	104	174	161	177	85	148	1194
	Poison		—	—	—	1	—	—	—	1	—	—	—	—	2
Total number of cases in medical department			200	214	156	190	148	291	300	396	417	662	492	614	4080

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APPENDIX I.—*Continued*

				1924			1925										Total
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	
Surgical Department	Head and Neck	Soft Tissue	Inflammation	3	9	9	49	32	31	75	2	68	12	21	88	390
			Injury	31	5	1	21	28	52	5	7	4	8	15	19	196
			Tumor	—	1	—	3	2	3	3	7	6	17	14	12	68
		Bones	Inflammation	—	—	—	—	—	—	—	—	—	—	—	—	—
			Injury	—	—	—	—	—	—	2	—	—	—	—	—	2
			Tumor	—	—	—	—	—	—	—	—	—	—	—	—	—
		Joints	Inflammation	—	—	—	—	—	—	—	—	—	—	—	—	—
			Injury	—	—	—	—	—	—	—	—	—	—	—	—	—
			Tumor	—	—	—	—	—	—	—	—	—	—	—	—	—
	Chest, Spinal Column and Abdomen	Soft Tissue	Inflammation	4	5	17	8	19	9	1	76	119	127	55	39	479
			Injury	3	—	—	—	—	—	45	4	—	—	—	—	52
			Tumor	—	—	—	—	—	—	4	1	—	—	—	—	5
		Bones	Inflammation	—	—	—	—	—	11	—	4	—	1	1	—	17
			Injury	—	—	—	—	—	—	—	—	4	2	—	—	6
			Tumor	—	—	—	—	—	—	—	—	—	—	—	—	—
		Joints	Inflammation	—	—	1	—	—	—	2	3	—	3	—	—	9
			Injury	—	—	—	—	—	—	—	—	1	—	—	—	1
			Tumor	—	—	13	—	—	—	—	—	—	—	—	—	14
	Extremities	Soft Tissue	Inflammation	57	35	95	95	130	116	108	151	154	152	116	184	1393
			Injury	24	42	46	—	76	11	97	71	33	99	178	125	802
			Tumor	19	—	2	—	—	—	—	—	—	—	1	4	26
		Bones	Inflammation	—	—	—	—	—	—	—	1	—	—	—	—	1
			Injury	—	—	—	—	—	—	—	8	30	31	31	16	116
			Tumor	—	—	—	—	—	—	—	—	—	—	—	—	—
		Joints	Inflammation	1	—	—	—	—	—	—	—	—	—	25	—	26
			Injury	—	1	—	—	—	—	—	—	—	—	—	—	1
			Tumor	—	—	—	—	—	—	—	—	—	—	—	—	—
Total number of cases in Surgical Department				142	98	171	176	287	246	342	335	419	452	457	487	3612

APPENDIX I.—*Continued*

		1924			1925									Total number of cases in the year
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	
Dermatology Department	Inflammatory	8	22	4	28	46	28	34	13	16	23	103	112	437
	Parasitic	8	11	3	14	4	13	19	16	19	11	8	1	127
	Local Infection	7	—	—	—	6	6	23	—	—	—	3	11	56
	Chronic Infection	—	—	16	—	—	—	—	—	—	—	—	—	16
	Hypertrophic	—	—	4	—	—	3	1	—	—	—	—	—	8
	Atrophic	—	—	—	—	—	—	—	2	—	—	—	—	2
	Anomalies of Secretion	—	—	4	2	—	—	—	—	—	12	19	—	37
Total number of cases in dermatology department		23	33	31	44	56	50	77	31	35	46	133	124	683
Ophthalmology Department	Eyelids	7	7	7	—	23	30	14	36	9	13	17	10	173
	Conjunctival	4	6	10	11	1	21	26	14	16	8	5	25	147
	Cornea	—	—	23	1	—	—	—	—	—	10	4	—	38
	Sclera & Tenons-capsule: Iris	—	—	—	—	1	—	19	8	2	—	1	—	31
	Sclera & Tenons-capsule: Ciliary Body	—	—	—	—	—	—	—	—	—	—	—	—	—
	Sclera & Tenons-capsule: Choroid	—	—	—	—	—	—	—	—	—	—	—	—	—
	Retain. Optic Nerve	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hyperopia	—	—	—	—	—	—	—	—	—	1	—	—	—
	Myopia	—	—	—	—	—	—	—	—	—	—	—	—	—
	Lens-cataract	—	—	—	—	—	—	—	—	—	—	—	—	—
	Ocular Muscle & Arhit	—	—	—	—	—	—	—	—	—	—	—	—	—
Total number of cases in ophthalmology Department		11	13	40	12	25	51	59	58	27	31	27	35	389

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APPENDIX I.—*Continued*

		1924			1925									Total number of cases in the year
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	
Ears	External Auditory Channel	21	—	1	—	—	13	—	1	1	—	8	5	50
	Drum Membrane	—	—	—	—	—	—	—	—	—	—	—	—	—
	Middle Ear	1	17	—	—	—	—	—	1	31	2	13	—	65
	Internal Ear	—	—	—	1	3	—	—	—	—	—	—	—	4
	Auditory Nerve	—	—	—	—	—	—	—	—	—	—	—	—	1
Nose and Throat	Nasal Covities	—	—	1	—	1	—	3	—	—	—	1	—	6
	Highmor's Cavities	—	—	—	—	—	—	—	—	—	—	—	—	—
	Pharynx	2	20	18	18	18	4	4	8	9	—	30	29	160
	Throat	—	5	—	—	—	2	1	3	—	—	—	—	10
Total number of cases in ears, nose & throat department ...		24	42	20	19	22	19	7	13	41	2	52	34	295
Grand Total		400	400	418	441	538	657	785	833	939	1193	1161	1294	9059

1. Of the five departments, medicine, surgery, dermatology, ophthalmology, and ears, nose and throat, the department of medicine claimed the largest number of cases. One half of the total number of cases in this department was stomach and intestine diseases, of which diarrhea (not bacillery dysentery) constituted more than 70 per cent, while next to them ranked systematic and blood diseases, of which cold comprised 80 per cent. Cold develops either into coughs or pains on the shoulders, wrist, back or heels. This is rather common with such workers as the salt boilers in the Chiu Ta Factory and firemen or carriers in the Pacific Alkali Works. The other 20 per cent of cases of systematic and blood diseases was due to insufficient nutrition.
2. In the department of surgery, the greatest number of cases was inflammation, mostly on soft tissues of the extremities and comparatively less on soft tissues of chest, spinal column and abdomen, head and neck. Cases of injury ranked next to inflammation. Of all inflamation cases in the surgical department, burns constituted less than 20 per cent. One-sixth of this was bodily inflammation, particularly common among such workers as salt boilers and firemen, while five-sixths consisted of burns, on extremities, head and neck and one or two cases of local burns, common among salt boilers of the Chiu Ta Factory and workers of the iron workshop and lime kiln of the Pacific Alkali Works.
   Injuries are usually not serious. Cases of severe injuries were less than 20.
3. Eczema of scrotum was the most common type of inflammatory skin diseases common among salt boilers, salt bakers and firemen of the Chiu Ta Factory. Next in order were parasitic scabies, of which there were about 60 cases.
4. In the dermatology department, statistics were kept only of skin diseases but not of venereal cases which were very rare.
5. In the department of ophthalmology all cases were conjunctivities. About 100 cases of trachoma were reported.
6. The majority of the cases of contagious diseases was malaria.
7. There were only two or three cases of pulmonary tuberculosis. About the same number were cases of syphilis, the patients of these cases being either cured or discharged.
8. Sickness occurred most frequently from June to September, somewhat less frequently from February to May, and comparatively few from October to January.
9. The total number of cases in this table is 9059. Calculating on the basis of 30 days a month and 12 months a year, the average is about 25 cases per day.
19. As to the result of treatment, cases of "not treated" or "unknown" constituted a little more than 2 per cent of all cases.